DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-021660 Address: 333 Burma Road **Date Inspected:** 09-Mar-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes An Qing Xiang. No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** OBG components.

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Mr. Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA Inspector observed and/or found the following:

Bay 14:

This QA Inspector observed the following work in progress:

OBG Seg 13AW:

The Shielded Metal Arc Welding (SMAW) process on weld joint no: Seg3013AH-157 [3441 RS stiffeners complete joint penetration (CJP) splice weld, at panel point (PP) 119]. The welder is identified as 070432 and was observed welding in 3G position. ZPMC Quality Control (QC) was identified as Liu Feng. The welding variables recorded by this QC appeared to comply with welding procedure specification (WPS): B-P-2213-TC-U4b-FCM.

The SMAW process on weld joint no: Seg3013AH-155 [3441 RS stiffener to Side Panel (SP) 3102A fillet weld, at PP119]. The welder is identified as 070432 and was observed welding in 2F position. ZPMC QC was identified as Liu Feng. The welding variables recorded by this QC appeared to comply with WPS: B-P-2112.

This QA Inspector observed ZPMC personnel performing fit-up of X4352A with Vertical Plate (VP) 3010A at

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PP120. ZPMC QC was identified as Liu Feng. See attached photo for further information.

OBG Seg 14W:

The Flux Cored Arc Welding (FCAW) process on weld joint nos: Seg3020AW-083 [Vertical Plate (VP) 3018A to SP3144B, CJP weld at PP125]. The welder is identified as 066239 and was observed welding in 3G position. ZPMC QC was identified as An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-T-2233-ESAB.

The FCAW process on weld joint no: Seg3020AJ-290 [RS3517P stiffener to Bottom Panel (BP) 3088A, CJP weld, at PP127.5 to PP128]. The welder is identified as 067275 and was observed welding in 2G position. ZPMC QC was identified as Liu Feng. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB.

Repair welding of weld joint no: Seg3020AP-002 [Anchorage Plate (AP) 3019 to AP3020, CJP weld]. The welder is identified as 045246 and was observed welding in the 1G position. Welding process was identified as SMAW. ZPMC QC was identified as An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-1G(1F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): 20385 Rev-1.

The FCAW process on weld joint no: DP3173-001-140 [Deck Panel (DP) 3173A to DP diaphragm fillet weld]. The welder is identified as 048433 and was observed welding in 2F position. ZPMC QC was identified as Shi Lei. The welding variables recorded by this QC appeared to comply with WPS: B-T-2132-ESAB.

Saddle Support Assembly:

Repair welding of weld joint no: SA3174-001-037, CJP weld. The welder is identified as 067520 and was observed welding in the 3G position. Welding process was identified as SMAW. ZPMC QC was identified as Li Ping. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per WRR: 10731 Rev-1.

Repair welding of weld joint no: SA3174-001-031, CJP weld. The welder is identified as 037996 and was observed welding in the 4G position. Welding process was identified as SMAW. ZPMC QC was identified as Li Ping. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-4G(4F)-FCM-Repair. Repair welding was done as per WRR: 10731 Rev-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable Contract documents.

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Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372., who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar,Sailesh	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer